í

1217 22 - 1 - 20

.

The wilder of the will also the second of th

•

- Published Literature on the Safety and Effectiveness of Pentetate Calcium Trisodium (Ca-DTPA) and Pentetate Zinc Trisodium (Zn-DTPA) for Treatment of Internal Contamination with Plutonium, Americium, or Curium
- 1. Aronson, A.L., P.B. Hammond, and A.C. Strafuss, "Studies with Calcium Ethylenediaminetetraacetate in Calves; Toxicity and Use in Bovine Lead Poisoning," <u>Toxicology and Applied Pharmacology</u>, 12:337-349, 1968.
- 2. Bair, W.J., J.F. Park, G.E. Dagle, et al., "Overview of Biological Consequences of Exposure to Plutonium and Higher Actinides," <u>Radiation Protection</u> Dosimetry, 26:125-135, 1989.
- 3. Ballou, J.E., G.E. Dagle, K.E. McDonald, et al., "Influence of Inhaled Ca-DTPA on the Long-term Effects of Inhaled Pu Nitrate," <u>Health Physics</u>, 32:479-487, 1977.
- 4. Blakely, W.F., P.G.S. Prasanna, M.B. Grace, et al., "Radiation Exposure Assessment Using Cytological and Molecular Biomarkers," <u>Radiation Protection</u> <u>Dosimetry</u>, 97:17-23, 2001.
- 5. Breitenstein, B.D., "1976 Hanford Americium Exposure Incident: Medical Management and Chelation Therapy," <u>Health Physics</u>, 45:855-866, 1983.
- 6. Breitenstein, B.D., and H.E. Palmer, "Lifetime Follow-up of the 1976 Americium Accident Victim," <u>Radiation Protection Dosimetry</u>, 26:317-322, 1989.
- 7. Breitenstein, B.D., S.A. Fry, and C.C. Lushbaugh, "DTPA Therapy: The U.S. Experience 1958-1987," in <u>The Medical Basis for Radiation Accident Preparedness II:</u> <u>Clinical Experience and Follow-up Since 1979</u>, eds. R.C. Ricks and S.A. Fry (New York: Elsevier, 1990), 397-406.
- 8. Brodsky, A., N. Wald, K.E. Lee, et al., "Plutonium-Americium Contamination Aspects of a Dry Box Involving Hand Amputation," in <u>Health Physics Operational Monitoring</u>, eds. C.A. Willis and J.S. Handloser (New York: Gordon and Breach, 1972), 1601-1620.
- 9. Brodsky, A., J.A. Sayeg, N. Wald, et al., "The Measurement and Management of Insoluble Plutonium-Americium Inhalation in Man," in <u>Proceedings of the First International Congress on Radiation Protection</u>, eds., W.S. Snyder et al.(New York: Pergammon Press, 1968), 1181-1190.
- 10. Brodsky, A., N. Wald, I.S. Horm, et al., "The Removal of Americium-241 from Humans by DTPA," <u>Health Physics</u>, 17:379, 1969.
- 11. Bruenger, F.W., W. Stevens, D.R. Atherton, et al., "Biological Mechanisms and Translocation Kinetics of Particulate Plutonium," in <u>Actinides in Man and Animals Proceedings of the Snowbird Actinides Workshop</u>, Snowbird, UT, October 15-17, 1979, ed. McDonald E. Wrenn, (Salt Lake City, UT: RD Press, 1981), 413-426.
- 12. Bruenger, F.W., D.M. Taylor, G.N. Taylor, et al., "Effectiveness of DTPA Treatments Following the Injection of Particulate Plutonium," <u>International Journal of Radiation Biology</u>, 60:803-818, 1991.
- 13. Calder, S.E., C.W. Mays, G.N. Taylor, et al., "Zn-DTPA Safety in the Mouse Fetus," <u>Health Physics</u>, 36:524-526, 1978.
- 14. Catsch, A., "Removal of Transuranic Elements by Chelating Agents," in Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International

- Seminar, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEI-SR-6/103, 295-305, 1976.
- 15. Catsch, A., and A.E. Harmuth-Hoene, "New Developments in Metal Antidotal Properties of Chelating Agents," <u>Biochemical Pharmacology</u>, 24:1557-1562, 1975.
- 16. Catsch, A., and A.E. Harmuth-Hoene, "Pharmacology and Therapeutic Applications of Agents Used in Heavy Metal Poisoning," in <u>The Chelation of Heavy Metals</u>, Alexander Catsch (Oxford: Pergammon Press, 1979), 171-183.
 - 17. Chen, W.Y., Y.C. Wang, and M.S. Kuo,
- "Determination of Total Mercury and Methylmercury in Human Hair by Graphite-Furnace Atomic Absorption Spectrophotometry Using 2,3-Dimercaptopropane-1-sulfonate as a Complexing Agent," <u>Analytical Sciences</u>, 18:255-260, 2002.
- 18. Cohen, N., McD.E. Wrenn, R.A. Guilmette, et al., "Enhancement of ²⁴¹Am Excretion by Intravenous Administration of Na₃ (CA-DTPA) in Man and Baboon," in <u>Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar</u>, Vienna,
- December 8-12, 1975. (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/20, 461-475.
- 19. Dilley, J.V., "Effect of DTPA on Inhaled ²³⁹PuF₄ in Beagles," <u>Radioelement Removal Studies</u>, 5.14-5.17, 1970.
- 20. Dolphin, G.W., "Review of Some Problems and Recent Research Work Associated with the Use of Chelating Agents for the Removal of Incorporated Radionuclides from Humans,"
- in <u>Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar</u>, Vienna,
- December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/104, 403-418.
- 21. Doolan, P.D., S.L. Schwartz, J.R. Hayes, et al., "An Evaluation of the Nephrotoxicity of Ethylenediaminetetraacetate and Diethylenetriaminepentaacetate in the Rat," <u>Toxicology and Applied Pharmacology</u>, 10:481-500, 1967.
- 22. Fasiska, B.C., D.E. Bohning, A. Brodsky, et al., "Urinary Excretion of ²⁴¹Am under DTPA Therapy," <u>Health Physics</u>, 21:523-529, 1971.
- 23. Ferguson, C.D., T. Kazi, and J. Perera, <u>Commercial Radiation Sources:</u> <u>Surveying the Security Risks</u>, (Monterey, CA: Monterey Institute of International Studies, 2003)
- 24. Fisher, D.R., S.E. Calder, C.W. Mays, et al., "Ca-DTPA-induced Fetal Death and Malformation in Mice," <u>Teratology</u>,14:123-128, 1976.
- 25. Fisher, D.R., C.W. Mays, and G.N. Taylor, "Ca-DTPA Toxicity in the Mouse Fetus," <u>Health Physics</u>, 29:780-782, 1975.
- 26. Gabard, B., "The Influence of Diethylenetriaminepentaacetate on the Synthesis of DNA, RNA, and Proteins in the Regenerating Rat Liver," <u>Biochemical Pharmacology</u>, 23:901-909, 1974.
- 27. Goans, R.E., "Update on the Treatment of Internal Contamination," in <u>The Medical Basis for Radiation Accident Preparedness: Proceedings of the 4th International REAC/TS Conference, eds. Robert C. Ricks, et al. (New York: Elsevier, 2001), 201-216.</u>

- 28. Hall, R.M., G.A. Poda, R.R. Fleming, et al., "A Mathematical Model for Estimation of Plutonium in the Human Body from Urine Data Influenced by DTPA Therapy," Health Physics, 34:419-431, 1978.
- 29. Hartvig, P., "Chemical Principles of Chelate Therapy in Neurotoxicology," Acta Neurologica Scandinavica, 70:199-202, 1984.
- 30. International Commission for Radiological Protection. Committee 2, <u>The Metabolism of Compounds of Plutonium and Other Actinides</u>; a <u>Report Prepared by a Task Group of Committee 2 adopted by the Commission in May 1972</u>, (Oxford: Pergamon Press, 1972), ICRP Publication 19.
- 31. International Commission on Radiological Protection. Committee 4, <u>The Principles and General Procedures for Handling Emergency and Accidental Exposures of Workers</u>, (Oxford: Pergamon Press, 1978), ICRP Publication 28.
- 32. Jones, C.W., C.W. Mays, G.N. Taylor, et al., "Reducing the Cancer Risk of ²³⁹Pu by Chelation Therapy," <u>Radiation Research</u>, 107:296-306, 1986.
- 33. Kalkwarf, D.R., V.W. Thomas, K.K. Nielson, et al., "1976 Hanford Americium Exposure Incident: Urinary Excretion of Trace Metals During DTPA Treatments," Health Physics, 45:937-947, 1983.
- 34. Katz, J., M.H. Weeks, and W.D. Oakley, "Relative Effectiveness of Various Agents for Preventing the Internal Deposition of Plutonium in the Rat," <u>Biology Research Annual Report 1953, HW-30437</u>, 112-113, 1954.
- 35. Langham, W.H., S.H. Bassett, P.S. Harris, et al., "Distribution and Excretion of Plutonium Administered Intravenously to Man," <u>Health Physics</u>, 38:1031-1060, 1980.
- 36. Lloyd, R.D., S.S. McFarland, G.N. Taylor, et al., "Decorporation of ²⁴¹Am in Beagles by DTPA," <u>Radiation Research</u>, 62:97-106, 1975.
- 37. Lloyd, R.D., C.W. Mays, S.S. McFarland, et al., "A Comparison of Ca-DTPA and Zn-DTPA for Chelating ²⁴¹Am in Beagles," <u>Health Physics</u>, 31:281-284, 1976.
- 38. Lucke-Huhle, C., "Proliferation-Dependent Cytotoxicity of Diethylenetriaminepentaacetate (DTPA) In Vitro," <u>Health Physics</u>, 31:349-354, 1976.
- 39. Mays, C.W., G.N Taylor, and D.R. Fisher, "Estimated Toxicity of Ca-DTPA to the Human Fetus," <u>Health Physics</u>, 30:247-249, 1976.
- 40. Morgan, R.M., and H. Smith, "The Effect of Acute and Sub-acute Treatment with Diethylenetriaminepentaacetic Acid on the Hepatic Function of Mice," <u>Toxicology</u>, 2: 43-49, 1974.
- 41. Morgan, R.M., and H. Smith, "Histological Changes in Kidney, Liver, and Duodenum of the Mouse Following the Acute and Subacute Administration of Diethylenetriaminepentaacetic Acid," <u>Toxicology</u>, 2:153-163, 1974.
- 42. Morin, M., J.C. Nenot, and J. Lafuma, "The Behavior of ²³⁷Np in the Rat," Health Physics, 24:311-315, 1973.
- 43. Muggenburg, B.A., J.A. Mewhinney, J.J. Miglio, et al., "The Removal of Inhaled ²³⁹Pu and ²³⁸Pu from Beagle Dogs by Lung Lavage and Chelation Treatment," in Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/30, 341-355.
- 44. Norwood, W.D., "DTPA Effectiveness in Removing Internally Deposited Plutonium from Humans," <u>Journal of Occupational Medicine</u>, 2:371-376, 1960.

- 45. Norwood, W.D., "Long-Term Administration of DTPA for Plutonium Elimination," Journal of Occupational Medicine, 8:130-132, 1962.
- 46. Norwood, W.D., "Therapeutic Removal of Plutonium in Humans," <u>Health Physics</u>, 8:747-750, 1962.
- 47. Planas-Bohne, F., and H. Ebel, "Dependance of DTPA-Toxicity on the Treatment Schedule," <u>Health Physics</u>, 29:103-106, 1975.
- 48. Planas-Bohne, F., and J. Lohbreier, "Toxicological Studies on DTPA," in <u>Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar</u>, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/1, 505-515.
- 49. Rosenthal, M.W., and A. Lindenbaum, "Influence of DTPA Therapy on Long-Term Effects of Retained Monomeric Plutonium: Comparison with Polymeric Plutonium," <u>Radiation Research</u>, 31:506-521, 1967.
- 50. Rosenthal, M.W., J.F. Markley, A. Lindenbaum, et al., "Influence of DTPA Therapy on Long-Term Effects of Retained Plutonium," <u>Health Physics</u>, 8:741-745, 1962.
- 51. Seidel, A., "Comparison of the Effectiveness of CaDTPA and ZnDTPA in Removing ²⁴¹Am from the Rat," <u>Radiation Research</u>, 54:304-315, 1973.
- 52. Seidel, A., "A Multivariate Analysis of Ca-DTPA-Effectiveness in Removing ²⁴¹Am from the Rat," Zeitschrift Fur Naturforschung. Teil C: Biochemie, Biophysik, Biologie, Virologie, 28:316-318, 1973.
- 53. Seidel, A., "Removal of ²⁵²Cf and ²⁴¹Am from the Rat by Means of Ca-DTPA and Zn-DTPA," in <u>Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar</u>, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/2, 323-339.
- 54. Seidel, A., and V. Volf, "Removal of Internally Deposited Transuranium Elements by Zn-DTPA," <u>Health Physics</u>, 22:779-783, 1972.
- 55. Silini, G., and S. Hornsey, "Studies on Cell-Survival of Irradiated Ehrlich Ascites Tumour III. A Comparison of the X-ray Survival Curves Obtained with a Diploid and a Tetraploid Strain," <u>International Journal of Radiation Biology</u>, 5:147-153, 1961.
- 56. Smith, V.H., J.E. Ballou, J.E. Lund, et al., "Aspects of Inhaled DTPA Toxicity in the Rat, Hamster and Beagle Dog and Treatment Effectiveness for Excorporation of Plutonium from the Rat," in <u>Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar</u>, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/26, 517-530.
- 57. Smith, V.H., J.E. Ballou, W.J. Clarke, et al., "Effectiveness of DTPA in Removing Plutonium from the Pig," <u>Proceedings of the Society for Experimental Biology and Medicine</u>, 107:120-123, 1961.
- 58. Smith, V.H., "The Effect of DTPA Dose on Plutonium Removal from Rats," (Richland, WA: U.S. Atomic Energy Commission, 1971), BNWL-1550, 96-97.
- 59. Stather, J.W., H. Smith, A.C. James, et al., "The Experimental Use of Aerosol and Liposomal Forms of Ca-DTPA as a Treatment for Plutonium Contamination," in Diagnosis and Treatment of Incorporated Radionuclides: Proceedings of an International Seminar, Vienna, December 8-12, 1975, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/14, 387-400.

- 60. Stather, J.W., H. Smith, M.R. Bailey, et al., "The Retention of 14C-DTPA in Human Volunteers after Inhalation or Intravenous Injection," <u>Health Physics</u>, 44:45-52, 1983.
- 61. Stevens, W., F.W. Bruenger, D.R. Atherton, et al., "The Retention and Distribution of ²⁴¹Am and ⁶⁵Zn Given as DTPA Chelates in Rats and of [14C]DTPA in Rats and Beagles," <u>Radiation Research</u>, 75:397-409, 1978.
- 62. Suslova, K.G., V.F. Khokhryakov, Z.B. Tokarskaya, et al., "Extrapulmonary Organ Distribution of Plutonium in Healthy Workers Exposed by Chronic Inhalation at the Mayak Production Association," <u>Health Physics</u>, 82:432-444, 2002.
- 63. Takada, K., and V. Wolf, "Comparison of the Effectiveness of CaDTPA and ZnDTPA in Removing ²⁴²Cm from the Rat," Radiation Research, 70:164-172, 1977.
- 64. Taylor, D.M., and F.D. Sowby, "The Removal of Americium and Plutonium from the Rat by Chelating Agents," Physics in Medicine and Biology, 7:83-91, 1962.
- 65. Taylor, D.M., and J.D. Jones, "Effects of Ethylenediaminetetraacetate and Diethylenetriaminepentaacetate of DNA. Synthesis in Kidney and Intestinal Mucosa of Folate Treated Rats," Biochemical Pharmacology, 21:3313-3315, 1972.
- 66. Taylor, G.N., and C.W. Mays, "Fetal Injury Induced by Ca-DTPA in Dogs," Health Physics, 35:858-860, 1978.
- 67. Taylor, G.N., J.L. Williams, L. Roberts, et al., "Increased Toxicity of Na₃CaDTP When Given by Protracted Administration," <u>Health Physics</u>, 27:285-288, 1974.
- 68. Volf, V., "Plutonium Decorporation in Rats: Experimental Evidence and Practical Implications," in <u>Diagnosis and Treatment of Incorporated Radionuclides:</u> <u>Proceedings of an International Seminar, Vienna, December 8-12, 1975</u>, (Vienna: International Atomic Energy Agency, 1976), IAEA-SR-6/3, 307-322.
- 69. Volf, V., <u>Treatment of Incorporated Transuranium Elements</u>, (Vienna, Austria: International Atomic Energy Agency, 1978), Technical Report Series No. 184.
- 70. Volf, V., A. Seidel, and K. Takada, "Comparative Effectiveness of Ca-DTPA, Desferrioxamine B and their Combination in Removing Transuranium Elements from Rats," <u>Health Physics</u>, 32:155-157, 1977.
- 71. Washington State Department of Health, "Report on the Response to the Accident on May 14, 1997 on the Hanford Site," http://www.doh.wa.gov/ehp/rp/rp-prf.htm (21 June 2002).
- 72. Weber, K.M., F.Bohne, and U. Rabe, "Decrease of DNA Synthesis in Duodenal Crypt Cells of Rats Treated with Na₃ (Ca-DTPA)," <u>European Journal of Pharmacology</u>, 11:117-118, 1970.